"Strategic Competitions" Update: Expanding MEP's Role in the National Manufacturing Agenda

MEP Advisory Board Meeting June 2013

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AGENDA

- Strategy
- Current Awards
  - E-CARs and T-CARs
  - Building Construction TEP
  - AMJIAC
- Coming Soon
  - Make it in America
  - Manufacturing Technology Acceleration Centers

Strategy

- Connect MEP centers to regional and national partners
- Test and introduce new services needed by manufacturers
- Develop and extend center staff skills
- Increase the size of the MEP national program
- Raise MEP visibility, gain credibility, position MEP as the “go-to” entity for manufacturing

Statutory Authority

- 15 U.S.C. § 278k(f)
- (f) Competitive grant program
  - (3) Purpose. The purpose of the program under this subsection is to add capabilities to the MEP program, including the development of projects to solve new or emerging manufacturing problems as determined by the Director, in consultation with the Director of the Hollings MEP program, the Manufacturing Extension Partnership Advisory Board, and small and medium-sized manufacturers. One or more themes for the competition may be identified, which may vary from year to year, depending on the needs of manufacturers and the success of previous competitions.

E-CAR/T-CAR Background and Focus (Expansion and Tools)

22 cooperative agreements for up to 3 years supporting the development of critical tools and new services designed to enhance the productivity, technological performance and global competitiveness of U.S. manufacturers.

FOCUS:

- Accelerating U.S. Innovation
- Supporting Manufacturing Supply Chain
- Increasing U.S. Exporting
- Promoting Environmental Sustainability
- Developing Renewable Energy Options

Outcomes to Date (Thru 2013-1 Survey)

- 274 projects completed with 237 unique clients
- $43M increased/retained in sales
- $11.7M client capital investment
- $2.3M cost savings
- 397 jobs created/retained
- 30% of clients reported increase in sales
- 17,000 hours of client training
- 2.5 months from export projects to first sale of exports

Common Themes/Lessons Learned

- MEP approach to Innovation does not hinge on a single tool or system
- A robust approach to Innovation that is flexible and enables several tools and methods to be combined and used as needed is a good recipe for success
- Good, functioning partnerships are KEY to success
- MEP cannot function alone, but serves a VERY critical role and can LEAD local and regional innovation efforts
- Technology commercialization efforts can hinge on access to capital
- A sustainable business model has to be considered prior to execution
- It is critical for manufacturing clients to have some “skin in the game”
- Federal, state, and local support for project initiatives can vary widely by location
- Tremendous content expertise resides within MEP centers
- “Train and do” deployment methodology is preferable to more traditional train- the-trainer sessions done separate from company work

Program Learning and Going Forward

PROGRAM LEARNING:

- Dedicated PI and project resources needed to be successful
- Explicit deliverables and better aligned performance requirements
- Focused and Specific scope of work
- Streamline Collection of Information and Measurement

GOING FORWARD:

- Continued E-CAR and T-CAR Project work in Year 3 through September 30, 2013
- Increased education, communication and collaboration with MEP system
- Integration of lessons learned and best practices in development efforts
- Sustainment of E-CAR/T-CAR initiatives within the MEP center service offerings after NIST MEP funding concludes
- Expansion of capacity across system - Replicable - Business Model and Resource Requirements

NIST MEP Building Construction Technology Extension Program (BCTEP)

- BCTEP focuses on the intersection of buildings and construction technologies with manufacturing
- First initiative is with DOE EERE BTO and PNNL
  - Focuses on buildings and construction technologies
  - Re-tuning existing energy systems in typical commercial/industrial buildings
  - Train building operations staff in re-tuning methods
  - Expect 15-20% energy savings when completed
- Three awards made to MEP Center-led teams
  - Delaware Valley Industrial Resource Center (DE MEP, Penn State, Drexel, Penn College of Technology, Performance Systems Development, Facility Engineering Associates)
  - NY State Department of Economic Development (CUNY, RIT)
  - Manex (Laney College, Local 39)

Advanced Manufacturing Jobs and Innovation Accelerator Challenge

- Goal is to assist the development and implementation of regionally-driven economic development strategies that support advanced manufacturing and cluster development.
- Partnership amongst five federal agencies and NSF
  1. Economic Development Administration
  2. NIST- Manufacturing Extension Partnership
  3. Department of Energy- AMO
  4. Department of Labor – ETA
  5. Small Business Administration

National Science Foundation – follow on funding, up to $1M to existing Small Business Innovation Research grantees within awarded projects.

Advanced Manufacturing Jobs and Innovation Accelerator Challenge

- $20 million total funding awarded
  - MEP awarded $5M for 3 year projects
- 10 projects total, 9 MEP Centers
    - MANEX, MMTC, NY HTR, NY Syracuse, OK Alliance, Catalyst Connection, DVIRC, Tennessee MEP, Impact WA
- MEP Center funding
  - gather/disseminate market intelligence to assist in planning
  - conduct outreach to existing firms
  - provide innovation and growth services
  - technical assistance and consulting services
  - track performance measures and generate impacts

Advanced Manufacturing Jobs and Innovation Accelerator Challenge

- Work began November 2012
  - 2nd Q progress reports received
  - Quarterly conference calls conducted with each Center
  - Conducting site visits
  - Holding bi-monthly webinars for peer learning
  - Survey instrument (to collect impacts) submitted for OMB approval

Advanced Manufacturing Jobs and Innovation Accelerator Challenge

Innovation Realization: Building and Supporting an Advanced Contract Manufacturing Cluster in MI

- enabled MMTC to reach previously unknown manufacturers
- assisting MI Economic Development in attracting large companies to the State, by finding quality suppliers

Advanced Manufacturing and Prototyping Center of East TN

- raised awareness and knowledge of MEP reach and relationships in the region
- seen as the connector to manufacturers and is the administrator of the “Made in Tennessee” movement

Make it in America Competition

- FFO published March 18. Proposals were due May 31.
- Four agencies – EDA, MEP, DOL, Delta Regional Authority
- 15 awards anticipated, $40 million available total
- New MEP cooperative agreements of up to $125,000 per year over three years
- MEP Activities:
  - Scout suppliers, determining their capabilities and capacity, defining gaps
  - Deliver technical assistance to address gaps
  - Collect impact and performance metrics

Make it in America Competition

- Objectives
  - to increase investment and grow jobs in the United States;
  - to encourage communities to proactively launch strategies to increase foreign direct investment and business expansion at home;
  - to encourage insourcing, either through on-shoring of productive activity by U.S. firms, fostering increased foreign direct investment, or incentivizing U.S. companies to keep jobs here, as well as train local workers to meet the needs of those businesses;
  - to provide the critical infrastructure, strategic planning, capacity building, technical assistance, and workforce skills training necessary for American communities to be the desired home for more businesses.

Make it in America Competition

- Proposals were due May 31
- Number of applicants: 56, from 30 states
- Merit Reviews to run June 24-July 15
- Policy Review Committee - July 18-30
- Selecting Official Review - September
- Decisions Announced Sept 20

Manufacturing Technology Acceleration Centers (M-TACs): Background and Focus

Background:

- ✓ Respond to need to focus on advanced manufacturing and efforts to restore domestic manufacturing and supply chain competitiveness
- ✓ Administration's 2014 Federal Budget request includes $25 M to deploy M-TACs

Goals:

- ✓ Provide technology acceleration support to small & mid-sized U.S. manufacturers through program that is nationally connected and locally deployed
- ✓ Foster connections between the existing MEP System and its network of Centers to leverage and amplify nationwide MEP technology acceleration assistance
- ✓ Deliver technology transition and commercialization services for small & mid-sized U.S. manufacturers on a nationwide-scale
- ✓ Serve as industry-specific coordination points for key supply chains

M-TAC Approach

Approach:

- ✓ Establish Industry/Technology focused Centers with specialized expertise that will constitute a program that is nationally connected and locally deployed
- ✓ Collaborate and partner with local, regional and national resources to fill gaps not being addressed by other national efforts

Emphasis:

- ✓ Supply Chain Development
- ✓ Technology Adoption & Commercialization
  - Existing & Emerging Technologies
  - Product & Process Technologies
- ✓ Collaboration
  - Leverage existing resources and capabilities
  - Fill gaps not being addressed by other national efforts
- ✓ Services relating to
  - technology and process integration; engineering; manufacturing scale up
  - new product development; product and process innovation
  - financing; legal (IP and regulatory); marketing, market analysis

Schedule – FY-2013 and 2014

2013 Request for Information (RFI) to inform 2014 M-TAC Investments – June 2013

- Financially sustainable business & cost share models,
- Technology transition & commercialization tools/services,
- M-TAC role with respect to Supply Chains,
- M-TAC performance evaluation

2013 Federal Funding Opportunity (FFO) for Initiation Pilot Projects – Post July 2013 - Target Award September 2013

- $1M total available
- Eligibility – Existing MEP Centers

Period of Performance: 1 Year

Focus – Inform 2014 M-TAC Investment:

- ✓ *Test/demo business model sustainability*
- ✓ *Provide technology transition, commercialization tools & services to small manufacturers*
- ✓ *Define M-TAC role relating to Supply Chain needs including participation of OEMs*
- ✓ *Metrics of Success*

FFO for M-TAC Deployment – Target Early 2014 – Pending Funding - $25M

- Establish nationally focused M-TAC's that leverage and amplify network of HMEP Centers

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